ADOPTION OF WEB 2.0 COMPONENTS IN EXTENDING LIBRARY SERVICES TO THE USERS : A STUDY

SYNOPSIS THE DOCTOR OF PHILOSOPHY IN LIBRARY AND INFORMATION

SUBMITTED BY

MRS. VANDANA VANKATRAO JADHAV

YEAR 2016

GUIDED BY

DR. RAJEEV R. PATHANKAR

SUBBMITED TO

SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY NANDED (M.S)

ADOPTION OF WEB 2.0 COMPONENTS IN EXTENDING LIBRARY SERVICES TO THE USERS : A STUDY

INTRODUCTION – Swami Ramanand Teerth Marathwada University,Nanded was established in 1994. It is located at Nanded in Maharashtra, India.Nanded was also part of the Maurya Empire under Ashoka (c272to231BCE) . Nanded district is located in the southeastern part of Maharashtra bordering Telangana. The name Nanded is widely be lived to have originated from "Nandi" the Vahan of Lord Shiva who performed penance on the banks (TAT) of river Godavari.

SRTMU, Nanded is intended to serve primarily the southern part of Marathwada. Specifically the District of Nanded, Latur, Parbhani, and Hingoli.The main University campus which is about 20km. south of Nanded township occupies approximitaly 525 acrs and there is a 22 acre sub campus at Latur. University affiliated to UGC, AIU,NAAC. And the 384. Colleges affiliated to the University. Each college has a precious library and information center that provide various services to its community. In this era impact of the web technology on college libraries has increased tremendously. So in this study which impact is on librarians. As well as which type of information products and services generated by the web technology in the world and where is our college libraries, Librarians and its services? College libraries its services and its product are measure by this research work. Libraries of all types have embraced web 2.0 technologies as a method of promoting themselves within the users community.(Dickson A & Holley R ,2010)Therefore college librarian adopt web technology to provide the services, to enhance the use of web and create the service modules for college libraries affiliated to SRTM University.

WEB 2.0 Definitions:

Definition: A second generation in the development of the world wide web, conceived as a combination of concept, trends, and technologies that focus on user collaboration, sharing of user Generated content and social networking. The internet viewed as a medium in which interactive experience, in the form of blogs, wikis, forums, etc plays a more important role simply accessing information.

Also defined by Tim O'Relly in (2004) "Web 2.0 is the business revolution in the computer industry caused by the move to the Internet as platform and an attempt to understand the rules for success on that new platform."

Web 2.0

Web 2.0 is a term that describes the changing trends in the use of World Wide Web technology and web design that aim to enhance creativity, secure information sharing, increase collaboration, and improve the functionality of the web as we know it (web 1.0). These have led to the development and evolution of web-based communities and hosted services, such as social-networking sites (i.e. Facebook, MySpace), video sharing sites (i.e. YouTube), wikis, blogs, etc.

Although the term suggests a new version of the World Wide Web, it does not refer to any actual change in technical specification, but rather to changes in the ways software developers and end- users utilize the web. Web 2.0 is a catch-all term used to describe a variety of developments on the web and a perceived shift in the way it is used. This shift can be characterized as the evolution of web use from passive consumption of content to more active participation, creation and sharing.

Web 2.0 websites allow users to do more than just retrieve just retrieve information. Now users can build on the interactive facilities of web 1.0 to provide "network as platform" computing, allowing users to run software-applications entirely through a browser. Users are able to co-author the data on a web 2.0 site and exercise control over it. These sites have an "architecture of participation" that encourages users to add value to the application as they use it. This stands in contrast to traditional websites, which limit visitors to passive viewing and whose content only the site owners can modify.

Web 2.0 websites typically include some of the following features/techniques:

- Search: the ease of finding information through keyword searching.
- Links: Guides to important pieces of information. The best pages are the most frequently linked to.
- Authoring: the ability to create constantly updating content that is co-created by users. In wikis, the content is iterative in the sense that the people undo and redo each other's work.
- IN blogs, it is cumulative in that posts and comments of individuals are accumulated over time.
- Tags: categorization of content by creating tags that are simple, one-word descriptions to facilitate searching and avoid having to fit into rigid, pre-made categories.
- Extensions: Automation of pattern matching for customization by using algorithms (i.e.Amazon.com recommendations).
- Signals: The use of RSS (Real Simple Syndication) technology to create a subscription model which notifies users of any content changes.

Web 2.0 and Education

Web 2.0 is difficult to define because it is not really a thing, but an approach, or shift in how we use the web we already have. The key is a change to a more active user who actually creates content rather than just passively receiving it. This change in how we experience the web mimics a parallel shift occurring in education. Instead of a top-down, "sage on the stage" approach to teaching, we are moving towards a more constructivist, "guide on the side" pedagogy which empowers students and encourages them to take responsibility for, and co-create, their learning experience.

Young people seem to be particularly to web 2.0 developments, often for the social aspects of easy communication, coordination, and online self-expression. Web 2.0 innovations harmonize well with current thinking about education practice. In particular, web 2.0 offers students' new opportunities to take more control of their learning and create customized information, resources, tools, and services. Web 2.0 also encourages a wider range of expressive capability, facilitates more collaborative ways of working, enables community creation, dialogue and knowledge sharing, and creates a setting for learners to attract authentic audiences.

I believe it is our duty as instructors to reach out to our students as best we can. Whether or not we choose to embrace web 2.0 technologies remains to be seen, but at the very least we should understand the concept and its main components. This is my intention in offering this workshop.

Now we will look at a few of the most popular web 2.0 tools in more depth:

- Blogs
- Podcasts
- Social Networks
- Wilkis
- eportfollos
- Micro-Blogs
- Social Bookmarking

Role of web 2.0 technology in LIS professionals

For centuries, social and technological changes have been affecting every profession and Library and Information Science is not an exception. However, this pace during the last two decades is very rapid, wherein arguably the

technological development has affected library services the most. More specifically for the last five years, Web 2.0 technologies had significant impact on the libraries of technical education as well as higher education all over world. Tim O'Reilly (2006) invented the term Web 2.0 in 2004 and defined Web 2.0 as:

Web 2.0 is the business revolution in the computer science industry caused by the move to the interest as platform, and an attempt to understand the rules for success on that new platform. Chief among those rules is this: Build applications that harness network effects to get better the more use them.

Principally, the term Web 2.0 includes community, conversation, participation, sense of expense, and sharing (Collins, 2007)

Community: Open conversation can lead to a sense of community and belonging within social sites. This aspect is very important in case of the LIS profession as these professionals are already a closely knit community. Besides, this helps them professionally by sharing the knowledge newer technologies.

Conversation: User participation discussion and feedback are welcomed encouraged Web 2.0 tools, which makes everybody feel the ownership of the system.

Participation: New information is created via collaboration between users. Everyone in the LIS profession can create contact; idea and knowledge for freely and are remixed and reused.

Experience: Engagement with other users and the community as a whole is rewarding and provides some types of fulfillment to all the LIS professionals.

Sharing: user can post about as much or as little of their lives as possible, thus making the feel at ease regarding their use of the Web 2.0 tools.

Many Web 2.0 technologies like blogs, micro blogs, wikis, and syndication of content through RSS, social bookmarking, media sharing, networking and other social software artifacts were incorporated in teaching and learning process in LIS education. These technologies provide many unique and powerful information sharing and collaborative features in teaching as well as with colleagues, administrative and libraries' staff (Grosseck, 2009). The traditional role of information professionals was to provide access to collection in the libraries; however, this role is fast changing in view of the technological advances notably the Web 2.0 and now Web 3.0 tools.

Application of Web 2.0 Tools in Libraries

Library and information science (LIS) programs prepare students for performing traditional information tasks such as indexing, retrieval and library management. The increased importance and centrality of information has moved LIS schools to offer new curricula that combine traditional librarianship and archiving with technological and social aspects of information.

The role of information in creating power and wealth is currently receiving more attention in various programs such as: Computer science, business/management schools, communications and schools of library and information science. It has become apparent that LIS training no longer automatically guarantees student the first pick of all employment opportunities in the field of information work. Abell and Hall in their portrayal of the 'e-information' job market claim that two types of e-information role seem to offer the greatest number of work opportunities: information architecture; and content management. While these roles are open to traditional information specialists they are often offered to highly skilled people who do not hold formal information qualification.

LIS education and indeed the profession itself are facing new competition and must acquire new knowledge to cope with it successfully. Indeed, examining various LIS school programs during the past decade has revealed that many schools have introduced new courses into their curricula such as social context of information technology, changes in use and user behaviour, human-machine interaction and information technology, information economics, communication skills, information policy and information brokering.

Today, the latest buzzword in the Internet world is 'Web 2.0'. It was enabled by the emergence of platforms such as blogging, social networks, free image and video uploading etc that collectively allowed easy content creation and sharing by everyone, altogether, Web 2.0 is an delivers a rich user experience based on principles of sharing, openness, collaboration autonomy and decentralization. Web 2.0 is an opportunity to explore one's creativity with technology. The opportunity be grabbed by the librarians to not only improve services in terms of promptness, accuracy and relevance but "to reach out beyond the walls and Websites of the institution" thus, extending the range of services in a customized mode using these tools.

Statement of the problem:

Web 2.0 Technology Adoption by College Librarian's: Special Reference to SRTMU, Nanded

Limitations of the Study:

The researcher has identified following aspects as the limitations of the study

1. The influence of certain factors like life style, daily routine work and other factors on the results of the study will not be taken into consideration.
2. No attempt will be made to control the factors like personal likes and dislikes of the librarians regarding the use of technology during testing period.
3. The difference in economic and educational back ground of the librarians will not be taken into consideration.
4. Since the subjects will be motivated verbally during data generation no attempts will be put to differentiate their level of motivation.
5. The personally traits of the librarians, which may influence the technology use, will not be taken into consideration.
6. The availability of the Web 2.0 technologies to the librarian will not be taken into consideration.

Determination of the study:

- The study will be delimited to the librarians working in the academic colleges
- The study will be delimited to academic colleges affiliated to SRTMU, Nanded
- The study will be delimited to only the attitude and adoption of librarians regarding the Web 2.0 technologies
- The study will be delimited to only librarians working in Arts, Science and commerce college librarians
- For the purpose of following Web 2.0 tools and application will be considered:
  Synchronous Communication
  Instant Messaging
  Content Delivery
  RSS
  Html
  Streaming Media
  Podcasting
  Vodcasting
  SMS Enquiry Service
  Collaborative Publishing Platforms
  Blog
  Wikkis
  Collaborative Service Platforms
  Social Networks
  Tagging
  Social Bookmarking Services

Hybrid Applications, Programmes and Programming Tools
Mashups
Ajax (Asynchronous Java Script and XML)
Application programming Interface (IPS)

Objective of the Study:

1. To study the attitude of academic college librarians towards Web 2.0 technologies
2. To study in detail the utility of Web 2.0 technology in providing library services
3. To study reach of Web 2.0 technologies amongst the academic colleges.
4. To study the role specific Web 2.0 technologies in improving the library service.
5. To study the role of Web 2.0 technologies in lessening burden of librarian of academic colleges

Hypothesis of the Study

It is hypothesized that there is less adoption of the Web 2.0 technologies amongst the academic college librarians working in colleges affiliated to SRTMU, Nanded.

Significance of the study:

1. This study will help the librarians to recognize the utility of different Web 2.0 technologies in discharging their duties as librarian.
2. This study will help teachers to understand the peculiarities/ trends of technique adoption/ preference to different technology etc.
3. The outcome of the present study would help in the professional development of Library as well as Library Science Professionals.

REVIEW OF LITERATURE

The present chapter provides details of the literature collected by the research scholar related to this study. Though it was not possible on the part of the investigator to get access to the entire published and unpublished researches in the field yet the relevant studies found from various sources, which the research scholar has come across, are cited below:

Gulati (2004) discussed the status of information and communication technologies usage in Indian libraries with special reference to special libraries and the efforts made by various institutions to propagate e-information products and services. The study concludes with challenges for library and information science professionals and an overview of initiatives taken by Government of India. Ali (2005) examined the use of electronic information services (EIS) among the users of the Indian Institute of Technology (IIT) Library in Delhi,

India. Both Questionnaire and observational methods were used for data collection where 300 valid samples were collected. The analysis of data collected covers awareness of EIS services, use of e-journals, advanced search facilities, acquaintance with electronic information sources, the purpose of using e-information, problems faced by the users while using EIS, infrastructure facility available and satisfaction level of users. The study found that Boolean logic and truncation are the most often used search facilities by IIT users. Lack of printing facilities, terminals and terminals and trained staff are the major reasons that would discourage users from accessing the EIS.

Maness (2006) suggested a definition and theory for "Library 2.0". It suggests that recent thinking describing the changing Web as "Web 2.0" will have substantial implications for libraries, and recognizes that while these implications keep very close to the history and mission of libraries; they still necessitate a new paradigm for librarianship. The paper applies the theory and definition to the practice of librarianship, specifically addressing how Web 2.0 technologies such as synchronous messaging and streaming media, blogs, wikis, social networks, tagging, RSS feeds, and mashups might intimate changes in how libraries provide access to their collections and user support for that access.

Varalakshmi (2007) informed that the Library and information science education in India is nearing to celebrate centenary celebrations. However, several issues need to be resolved to meet the demands of the contemporary information society. The research paper reviews the growth of LIS education in India, foresees the future trends and suggest for national consensus on some of the basic issues. Dhiman & Sharma (2008) observed that today, the terms like web 2.0, library 2.0 and blogging are the buzzwords. Along with web 2.0, blogging is also getting popularity among the library professionals. Weblog or blog is the website consisting of journal like entries that are arranged in reverse chronologically order. These are distinguished by their frequent, usually short, post, and by way they reflect their owner's personality. This research article discusses the Blog and its uses in library & information centers.

Pradhan & Gupta (2009) stated that blog and wiki which are not only useful for web communities at large but also very helpful for the librarians/information scientists and disseminating information in the web 2.0 environment. A wiki is a Website that allows and encourages users to share information by freely writing new content, adding to existing content, and editing or commenting on content. Similarly a blog is a website in which items are posted on a regular basis and displayed in reverse chronological order. The paper gives a detailed account of how the DRDO communities is getting benefitted through

their DRDO intranet by DRDO wiki and DRDO Blog which are being hosted and administered by DESDOC.

Tripathi and kumar (2010) provided a reconnaissance of major academic libraries located in Australia, Canada, the U.K. and U.S.A. that have embraced web 2.0 tools for enhancing library services. The research is based on a survey of websites of 277 university libraries. The checkpoints used for this evaluative study were given by Nguyen (2008) for evaluating various web 2.0 tools. Additional checkpoints were arrived at after visiting and browsing the various sites. The findings of the study acknowledge the strength of web 2.0 tools in improving library services for users. Really Simple Syndication (RSS), Instant Messaging (IM) and blogs are popular in academic libraries. The paper concludes by offering best practices for implementing web 2.0 tools in academic libraries.

Kalita (2010) brought out a definition and theory for "Library 2.0". It suggests that recent thinking describing the changing web as "Web 2.0" will have substantial implications for libraries, and recognizes that while these implications keep very close to the history and mission of libraries; they still demand a new paradigm for librarianship. The paper applies the theory and definition to the practice of librarianship in the library 2.0 environment

Mahmood and Richardson (2011) aimed to survey the web sites of the academic libraries of the Association of Research Libraries (USA) regarding the adoption of web 2.0 technologies. The websites of 100 member academic libraries of the Association of Research Libraries (USA) were surveyed. All libraries were found to be using various tools of web 2.0 Blogs, microblogs , RSS, instant messaging, social networking sites, mashups, podcast, and vodcast were widely adopted, while wikis, photo sharing, presentation sharing, virtual worlds, customized webpage and vertical search engines were used less. Libraries were using these tools for sharing news, marketing their services, providing information literacy instruction, providing information about print and digital resources, and soliciting feedback of users.

Gardois et al., (2012) observed that academic, medical and research libraries frequently implement web 2.0 services for users. Several reports notwithstanding, characteristics and effectiveness of services are unclear. To find out: the Web 2.0 services implemented by medical, academic and research libraries; study designs, measure and types of data used in included articles to evaluate effectiveness; whether the identified body of litreture is amenable to a systematic review of results.

Tyagi (2012) reported on the awareness and usage analysis of Web 2.0 technologies by library professionals in library and in their personal life at their workplaces. The methodology for the proposed study is 'Survey Method' with the help of structured questionnaire. The sample respondents chosen for the study consist of librarians, deputy librarians, assistant librarians, and library assistants. Total 100 questionnaires were distributed (randomly) to the selected sample for the current year; 92 valid samples were collected and analyzed. Web 2.0 is especially useful and creative when knowledge is digitized made modular and allowed to be used and distributed in a flexible way. Study was carried out to know the awareness regarding Web 2.0 tools like blogs, Wikipedia, SS Feed, social networks, podcasting and others (SNS, mashup). It is observed from the study that significant portion of the respondents have good knowledge about the Web 2.0. Web 2.0 provided innovative and interesting resources for librarians to serve their users as quickly and effectively as possible as possible with new more inclined towards adaptation of Web 2.0 technologies in their personal life. In the geographical distribution, the libraries are far away from Web 2.0 technologies.

Plan of work

1. Enlisting the LIS professionals to be included in the study.
2. Literature survey to study various aspects of Web 2.0 Technology
3. Finding and analyzing various Websites supporting Web 2.0 tools and technology.
4. Formulation of data collection tools i.e. designing a structured Questionnaire.
5. Collection of data from the target community i.e. LIS professionals working in academic college libraries affiliated to SRTMU, Nanded
6. Statistical Analysis of collected data
7. Drawing inference, conclusions and making recommendation and suggestion there on.

Chapter Plan

Chapter-I - Introduction

Chapter -II- Review of literature

Chapter -III- Research Methodology

Chapter -IV- Data collection

Chapter -V- Analysis and interpretation

Chapter -VI- Plan of effective use of web application by college librarians

Chapter -VII- Conclusion and suggestion

BIBLOGRAPHY

1. Collection of data from the target community I.e. LIS professionals working in academic college libraries affiliated to SRTMU Nanded.
2. Collins, M (2007), Web 2.0, Library 2.0, and the Hyperlinked Libtaty. Serials Review, 33,253.
3. Grosseck, G. (2009) To use or not to use web 2.0 in higher education? Procedia Social and Behavior Sciences,1,478-482.
4. Maness J.M. (2006). Library 2.0 Theory: web 2.0 and Implications for Libraries, Webology,3(2)
5. Naushad ali, The use of electronic resources at IIT Delhi Library: a study of search behaviours, The Electronic Library. 2005,23(6), pp.691-700
6. Pradhan B. & Gupta p. (2009). Blog and wiki : DRDO Perspective, 7th International CALIBER-2009,Pondicherry University, puducherry,pp.25-27
7. Paolo Gardois, Nicoletta Colombi Gaetano Grillo and Maria C Villanacci. Implementation of web 2.0 services in academic, medical and research libraries: a scoping review. Health information & Libraries Journal.2012,29(2),pp90-109
8. R.S.R. Varalakshmi. Need for National Consensus on Library and Information Science Education in India (2007)27(2).
9. Sunil Tyagi. Use of web 2.0 Technology by Library Professionals: Study of Selected Engineering Colleges in western Uttar Pradesh.2012,32(5)
10. http://orangecopper.com/blog/listofthebest social network website 2011 (retrived on June 2013-07-12)
11. http://www.oreillynt.com/pub/a/oreilly.tim/news/2005/09/30whatis web 2.0 html

Signature of Scholar Signature of guide